

What is claimed is:

1. Apparatus for accessing a body cavity, comprising:

a tubular member formed by everting a length of material upon itself, the tubular member defining a main body portion;

a distal cuff disposed at a distal end of the main body portion; and

a proximal cuff disposed at a proximal end of the main body portion,

wherein the tubular member has a deflated configuration for insertion into the body cavity and an expanded configuration when pressurized.

2. The apparatus of claim 1, wherein the main body portion forms an annulus having a central lumen.

3. The apparatus of claim 1, wherein the tubular member comprises an interior wall joined to one or more exterior walls at a plurality of contact points.

4. The apparatus of claim 3, wherein the contact points are arranged in a uniform pattern to enhance pressure distribution within the tubular member during inflation.

5. The apparatus of claim 1, wherein the proximal cuff and distal cuff are formed by locally produced chambers or features.

6. The apparatus of claim 1, wherein the distal cuff is configured to engage an interior plane of a patient's uterus.

7. The apparatus of claim 1, wherein the distal cuff is configured to prevent lateral portions of a patient's vaginal wall from converging.

8. The apparatus of claim 1, wherein the proximal cuff is configured to protect a patient's external vaginal area from rubbing or scraping.

9. The apparatus of claim 1, further comprising an inflation lumen that extends from the proximal cuff to the distal cuff.

10. The apparatus of claim 9, wherein the tubular member comprises an interior wall and an exterior wall and the inflation lumen is disposed between the interior wall and the exterior wall.

11. The apparatus of claim 9, wherein the inflation lumen enhances rigidity of the tubular member in the deflated configuration.

12. The apparatus of claim 9, wherein the inflation lumen has a substantially helical configuration.

13. The apparatus of claim 9, wherein the inflation lumen is configured to inflate the tubular member from the distal cuff to the proximal cuff.

14. The apparatus of claim 9, wherein the inflation lumen includes a plurality of holes that provide uniform inflation of the tubular member.

15. The apparatus of claim 2, further comprising a channel disposed within the central lumen.

16. The apparatus of claim 15, wherein the channel facilitates securing tools during a vaginal examination.

17. The apparatus of claim 1, wherein the tubular member is coupled to a pump configured to inflate the tubular member with gas or liquid.

18. The apparatus of claim 1, wherein the tubular member is coupled to a stopcock configured to modulate inflation of the tubular member.

19. The apparatus of claim 1, wherein the tubular member further comprises a lubricous exterior coating.

20. The apparatus of claim 1, wherein the tubular member further comprises a coating for topical distribution.

21. The apparatus of claim 20, wherein the coating contains drugs, genes or proteins.

22. The apparatus of claim 20, wherein the coating includes medications for treating yeast infections.

23. The apparatus of claim 1, wherein the tubular member further comprises an exterior layer including a plurality of micro-perforations for the

passage of drugs in a liquid or gel form.

24. Apparatus for accessing a body cavity, comprising:

an inflatable body including a main body portion, a distal cuff disposed at a distal end of the main body portion and a proximal cuff disposed at a proximal end of the main body portion; and

a handle assembly attached to the inflatable body to facilitate insertion and manipulation of the inflatable body within the body cavity;

wherein the inflatable body has a deflated configuration for insertion into the body cavity and an expanded configuration when pressurized.

25. The apparatus of claim 24, wherein the handle assembly comprises an intravaginal tongue portion and a gripping portion for holding and manipulating the tongue portion.

26. The apparatus of claim 25, wherein the tongue portion includes a concave anterior surface to match an exterior contour of the inflatable body.

27. The apparatus of claim 25, wherein the tongue portion includes a distal lip that is configured to engage the distal end of a patient's vaginal canal.

28. The apparatus of claim 25, wherein the tongue portion is disposed at an angle relative to the gripping portion.

29. The apparatus of claim 28, wherein the angle is greater than 90 degrees.

30. The apparatus of claim 28, wherein the angle is between 120 degrees and 160 degrees.

31. The apparatus of claim 25, wherein the gripping portion includes a thumb rest.

32. The apparatus of claim 25, wherein an anterior surface of the tongue portion includes measurement indicia.

33. The apparatus of claim 32, wherein the scale comprises radiopaque markings.

34. The apparatus of claim 25, wherein the gripping portion further comprises a guide for supporting an inflation lumen.

35. The apparatus of claim 24, wherein the inflatable body is attached to the handle assembly using adhesives, ultrasonic welding or heat welding.

36. The apparatus of claim 24, wherein the inflatable body is coupled to a pump configured to expand the inflatable body with gas or liquid.

37. The apparatus of claim 24, wherein the inflatable body is coupled to a stopcock configured to modulate expansion of the inflatable body.

38. The apparatus of claim 24, wherein the inflatable body further comprises a lubricous exterior coating.

39. The apparatus of claim 24, wherein the inflatable body further comprises a coating for topical distribution.

40. The apparatus of claim 39, wherein the coating contains drugs, genes or proteins.

41. Apparatus for accessing a body cavity, comprising:

an inflatable body; and

a modular handle assembly attached to the inflatable body to facilitate insertion and manipulation of the inflatable body within the body cavity;

wherein the inflatable body has a deflated configuration for insertion into the body cavity and an expanded configuration when pressurized.

42. The apparatus of claim 41, wherein the modular handle assembly comprises an intravaginal tongue portion and a detachable gripping portion for holding and manipulating the tongue portion.

43. The apparatus of claim 42, wherein the tongue portion and gripping portion are releasably connected with a luer-type connector.

44. The apparatus of claim 42, wherein the tongue portion includes a convex anterior surface configured to mate with an interior surface of the inflatable body.

45. The apparatus of claim 42, wherein the tongue portion is substantially cylindrical.

46. The apparatus of claim 42, wherein the tongue portion includes at least one inflation hole for expanding the inflatable body.

47. The apparatus of claim 46, wherein the tongue portion includes a lumen in communication with the inflation holes.

48. The apparatus of claim 46, wherein the gripping portion includes a lumen in communication with the inflation holes.

49. The apparatus of claim 46, further comprising an inflation device in communication with the inflation holes.

50. The apparatus of claim 41, wherein the modular handle assembly comprises hollow plastic fabricated using an injection molding process.

51. The apparatus of claim 41, wherein the inflatable body is attached to the handle assembly using adhesives, ultrasonic welding or heat welding.

52. The apparatus of claim 41, further comprising a sheath that surrounds the inflatable body during insertion into the body cavity.

53. The apparatus of claim 41, wherein the sheath is adapted to burst open during expansion of the inflatable body.

54. The apparatus of claim 42, wherein the tongue portion is disposed at an angle relative to the

gripping portion.

55. The apparatus of claim 54, wherein the angle is greater than 90 degrees.

56. The apparatus of claim 54, wherein the angle is between 120 degrees and 160 degrees.

57. The apparatus of claim 41, wherein the inflatable body is coupled to a pump configured to expand the inflatable body with gas or liquid.

58. The apparatus of claim 41, wherein the inflatable body is coupled to a stopcock configured to modulate expansion of the inflatable body.

59. The apparatus of claim 41, wherein the inflatable body further comprises a lubricous exterior coating.

60. The apparatus of claim 41, wherein the inflatable body further comprises a coating for topical distribution.

61. The apparatus of claim 60, wherein the coating contains drugs, genes or proteins.